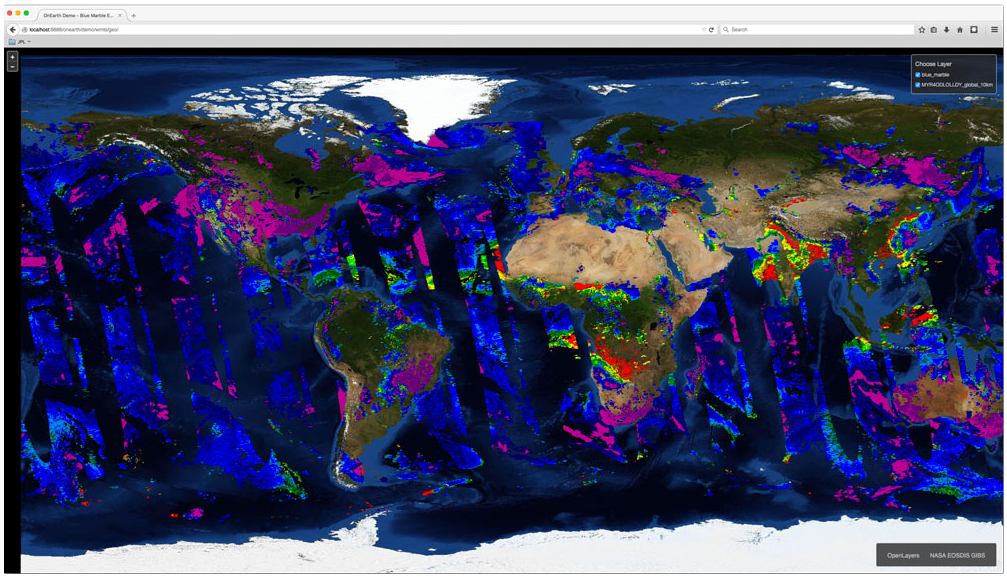
Announcing OnEarth-Boxes: Virtual Machines to Serve Geospatial Imagery



We're pleased to announce the release of OnEarth-Boxes (https://github.com/nasa-gibs/onearth-boxes), a new system that makes it easy to create new virtual machines with pre-configured OnEarth servers for experimentation, education, and development. OnEarth is the lightweight geospatial imagery server used by GIBS to serve hundreds of products to users across multiple map projections.

Using Packer (http://packer.io) virtual machine image creation software, OnEarth-Boxes creates a ready-to-go CentOS6 VM with OnEarth, the MRF imagery storage format, and their dependencies installed and configured. Build scripts are currently included to make VMWare, VirtualBox, and Vagrant/VirtualBox images.

OnEarth-Boxes also includes some demo imagery, accessible through a simple OpenLayers endpoint. WMTS, TWMS/KML, and Mapserver endpoints are pre-configured. Use OnEarth-Boxes to get a feel for how the software works and what its capabilities are without having to integrate it within an existing system.

Since all the OnEarth/MRF utilities are included, OnEarth-Boxes is a great way to quickly get an instance of OnEarth running in order to experiment with your own imagery. Especially when using Vagrant, it's easy to import new imagery into the VM via a shared folder, create MRFs, and add new layers to OnEarth.

OnEarth-Boxes is also useful as a sandbox for development with OnEarth or MRF. All the source code is included and linked to the Github repo by default, and all the necessary development utilities for compilation and RPM-building are installed.

The Packer build process is highly customizable and allows for easy, repeatable creation of OnEarth VMs by modifying the build parameters and scripts. The Packer infrastructure includes multiple builders and post-processors for a wide variety of VM environments.

To get started with OnEarth-Boxes, visit https://github.com/nasa-gibs/onearth-boxes.